Developing Skills for Green Jobs

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Skills for Green Jobs (2009)

Country coverage

60% of world population
59% of global GDP
64% of global CO2 emissions
Green structural change

- Additional jobs will be created.
- Some employment will be substituted.
- Certain jobs may be eliminated without direct replacement.
- Many existing jobs will be redefined.

Net employment gains possible if the right policies are shaped and implemented.
Share of low-skilled employment by industry
Labour market effect may be modest - but skills challenge could be big

15 most carbon-intensive sectors:

- Share of employment: 9 - 15%
- Share of low-skilled workers: 14 – 26%

- Up-skilling of these workers requires more investment
- More need for (local) economic diversification
Green structural change – Energy sector

Figure 10: Total employment in the energy sector, and its disaggregation into fuel and power, and energy efficiency under the G2 scenario

Sectors affected and retraining needs

- Agriculture, forestry and fisheries
- Extracting industries and fossil-fuel energy generation
- Emissions intensive manufacturing, in particular:
  - Automotive sector and related supply chains;
  - Ship-building and related marine engineering activities.

Source: IPCC 2007
Skills for ‘new’ Green Jobs

Renewable Energy
- Wind Farm
- Sea Waves
- Solar
- Waste to Gas to Electricity
- Ethanol as fuel
- Hydro
- Bagasse

New Design
- New Building Orientation
- Architecture
- Functionality
- Intelligent system
- Painting

Hydro
Bagasse
Wind Farm
Sea Waves
Solar
Waste to Gas to Electricity
Ethanol as fuel
Green jobs in greening areas

- Energy Conservation
  - New economic bulbs
  - Reduce heat transfer from top of roof
  - Paint
  - Garden

- Recycle waste to compost
  - Recycle water for use other than drinking
  - Sensitization of every Mauritian to reduce consumption and to protect environment

- Energy Conservation
  - Energy Audit

- Other measures
Emerging skills shortages

Skills shortages **already pose a major barrier to transitions to green economies and**

- In certain sectors and occupations
- Particular core skills
- Multi-skillling requirements

**Why are there shortages?**

- Underestimated growth of some sectors, such as for green technologies
- General lack of scientists and engineers
- National skill structure which does not meet skills demand
- Low reputation of sectors – failure to attract trainees
Skills responses for greener economies

**Initial TVET/higher education**
- Adjusting existing training programmes
- Devising new training programmes, degrees, apprenticeships etc.

**Active labour market policy**
- Retraining measures for workers affected by green structural change
- Retraining for new green opportunities
- Green stimulus packages (very few had skills components)

**Continuing training**
- Established public and private providers, universities
- Enterprises fill gaps
- New providers
- Business associations
- Multi-stakeholder approaches
ILO-OECD report on labour market implications of green growth (G20 countries)

Four areas for policy action

1. Meeting the emerging job-skills requirements
2. Helping workers to move from declining firms and sectors to growing one – whilst providing income security
3. Assuring workers’ rights in growing green sectors and seizing opportunities in growing green sectors (esp. in dev. countries)
4. Strengthening labour market information systems and social dialogue for better understanding and strategizing
An effective skills response needs to...

Combine top-down and bottom-up approaches: sectoral, regional or local solutions often more effective

... be coordinated ...

Inter-ministerial coordination, social partners, between training providers and enterprises or industry associations/sector skills bodies

... identify skill needs and related training measures through social dialogue ...

• Labour Market Information systems need to adapt
• Sectoral approaches are much sought

... and go hand-in-hand with employment generation measures.
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ilo.org/green-jobs-programme